Amendments to and Listing of the Claims:

A listing of the entire set of pending claims is submitted herewith per 37 CFR
1.121. This listing of claims will replace all prior versions and listings of claims in the
application.

1. (Currently amended) A method of providing bandwidth fairness in a wireless
network that includes a plurality of wireless stations that share the wireless network
bandwidth during a particular service interval, the method comprising:

determining bandwidth requirement for [[a]] the particular service interval for each
of the wireless stations;

determining an allocated transmission time for each of the wireless stations
based on a set physical transmission rate, wherein each of the wireless stations has
individually allocated transmission time based on at least the total quantity of data that
needs to be transmitted within the service interval by each of the wireless stations; and

fragmenting a packet by at least one of the wireless stations if the at least one
wireless station transmits at a transmission rate that is lower than the set physical
transmission rate.

2. (Previously presented) The method as recited in claim 1, wherein the
allocated time for each of the plurality of wireless stations is proportional to the quantity
of data to be sent by the respective stations during the service interval.

3. (Previously presented) The method as recited in claim 1, wherein for each of
the at least one wireless station a number of the fragments is equal to the set physical
transmission rate divided by the lower transmission rate.

4. (Previously presented) The method as recited in claim 1, wherein the
allocated transmission time is equal to the total data of all packets generated in the
beacon interval divided by the set physical transmission rate.

5. (Previously presented) The method as recited in claim 1, wherein the wireless network is a multiple physical transmission rate wireless network.

6. (Previously presented) The method as recited in claim 5, wherein the wireless network is a Generalized Packet Radio Service (GPRS) network.

7. (Previously presented) The method as recited in claim 5, wherein the wireless network is a Wireless Local Area Network (WLAN).

8. (Previously presented) The method as recited in claim 1, wherein each of the at least one wireless stations transmits all remaining fragments after all wireless stations that transmit at the set physical transmission rate have completed transmitting their packets.

9. (Previously presented) The method as recited in claim 8, further comprising maintaining a particular quality of service QoS for each of the wireless stations that maintain transmission at the set physical transmission rate during a service interval.

10. (Previously presented) The method as recited in claim 1, wherein each of the at least one wireless stations transmits all remaining fragments until its physical transmission rate is greater than the set physical transmission rate.

11. (Currently amended) A wireless network, comprising:
at least one access point; and
a plurality of wireless stations that share the wireless network bandwidth during a service interval, wherein in each the service interval, the access point allocates a transmission time for each of the wireless stations based on their transmission requirements at a set physical transmission rate that is fixed for the service interval, wherein each of the wireless stations has individually allocated transmission time based

on at least the total quantity of data that needs to be transmitted within the service interval by each of the wireless stations; and wherein the plurality of wireless stations transmit at the set physical transmission rate; and wherein if any of the plurality of wireless stations change their transmission rate to a lower transmission rate than the set physical transmission rate during the service interval, each of the wireless stations that change their transmission rate fragment their respective packets into two or more fragments of equal length.

12. (Cancelled)

13. (Cancelled)

14. (Previously presented) The wireless network as recited in claim 11, wherein the number of fragments is equal to the lower transmission rate divided by the set transmission rate.

15. (Previously presented) The wireless network as recited in claim 11, wherein the transmission time is equal to the total data of all packets generated in the beacon interval divided by the set physical transmission rate.

16. (Previously presented) The wireless network as recited in claim 11, wherein each of the plurality of wireless stations is adapted to transmit at multiple physical transmission rates.

17. (Previously presented) The wireless network as recited in claim 16, wherein the wireless network is a Generalized Packet Radio Service (GPRS) network.

18. (Previously presented) The wireless network as recited in claim 16, wherein the wireless network is a Wireless Local Area Network (WLAN).

19. (Previously presented) The wireless network as recited in claim 11, wherein a particular quality of service (QoS) is maintained for each of the plurality of wireless stations that transmit at the set physical transmission rate for the entire service interval.

20. (Previously presented) The wireless network as recited in claim 11, wherein each of the wireless stations that change their transmission rate to a lower transmission rate than the set physical transmission rate during the service interval send their remaining fragments after all wireless station that transmit at the set transmission rate have completed transmission of their respective packets.